EXPRESS TERMS
FOR
PROPOSED BUILDING STANDARDS
OF THE
OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT

REGARDING PROPOSED CHANGES TO
CALIFORNIA MECHANICAL CODE
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 4

LEGEND FOR EXPRESS TERMS

1. Existing California amendments or code language being modified: All such language appears in *italics*, modified language is underlined.
2. New California amendments: All such language appears *underline and in italics*.
3. Repealed text: All such language appears in ~~strikeout~~.

EXPRESS TERMS

CHAPTER 1 – GENERAL
Adopt entire 2006 Uniform Mechanical Code (UMC) Chapter and carry forward existing amendments of the 2001 California Mechanical Code (CMC) for OSHPD 1, 2, 3 & 4. Also, amend Chapter as follows:

103.0 Scope.

103.1 Applicability.
…

Where, in any specific case, different sections of ~~this code~~ ***[For OSHPD 1, 2, 3 & 4]*** *the California Building Standards Code* specify different materials, methods of construction, or other requirements, the most restrictive shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.
…

108.1.1.12 [for OSHPD] Office of Statewide Health Planning and Development.

108.1.1.12.1 [for OSHPD 1]

Application – *General acute-care hospitals and acute psychiatric hospitals, excluding distinct part units or distinct part freestanding buildings providing skilled nursing or intermediate-care services. For structural Regulations: Skilled nursing facilities and/or intermediate-care facilities except those skilled nursing facilities and intermediate-care facilities of single story, Type V, wood or light steel-frame construction.*
…

108.1.1.12.2 [for OSHPD 2]

Application – *Skilled nursing facilities and intermediate-care facilities, including distinct part skilled nursing and intermediate-care services on a general acute-care or acute psychiatric hospital license, provided either in a separate unit or a freestanding building. For Structural Regulations: Single-story, Type V skilled nursing facility and/or intermediate-care facilities utilizing wood or light steel-frame construction.*
…

108.1.1.12.3 [for OSHPD 3]

Application – Licensed ~~C~~clinics and any freestanding building under a hospital license where outpatient clinical services are provided.
…

NOTATION:
Authority: Health and Safety Code Sections1226, 1275, 18928, 129790 and 129850; Government11152.5
Reference: Health and Safety Code Section 129850

CHAPTER 2 – DEFINITIONS
Adopt entire 2006 Uniform Mechanical Code (UMC) Chapter and carry forward existing amendments of the 2001 California Mechanical Code (CMC) for OSHPD 1, 2, 3 & 4.

NOTATION:
Authority: Health and Safety Code Sections1226, 1275, 18928, 129790 and 129850; Government11152.5
Reference: Health and Safety Code Section 129850

CHAPTER 3 – GENERAL REQUIRMENTS
Adopt entire 2006 Uniform Mechanical Code (UMC) Chapter and carry forward existing amendments of the 2001 California Mechanical Code (CMC) for OSHPD 1, 2, 3 & 4 with the following modifications:

SECTION 313.2 Services / Systems and Utilities. *Refer to Section 1224.4.1 ~~420A.4.0, Chapter 4A, Part 2,~~ California Building Code.*
...

SECTION 315.0 – AIR CONDITIONING AND HEATING SYSTEMS
…
315.1.4 *Rooms controlled by the same thermostat with similar exposure, function and requirements may have humidity control with zone humidifier where designs are specifically approved by the enforcing agency.*
…

SECTION 316.0 – ESSENTIAL MECHANICAL PROVISIONS [FOR OSHPD 1, 2, 3 (surgical clinics only) & 4]
During periods of power outages emergency electrical power shall be provided for the following equipment:

316.1 (Does not apply to OSHPD 3 surgical clinic.) *All heating equipment necessary to maintain a minimum temperature of 60ºF (15.6º) in patient areas which are not specified in Table 315.*

316.2 *All heating equipment necessary to maintain the minimum temperatures for sensitive areas as specified in Table 315.*

316.3 *Equipment necessary for humidification of the areas listed in Table 315.*

316.4 *All supply, return and exhaust fans required to maintain the positive and negative air balances as required in Table 4-A.*

316.5 *All control components and control systems necessary for the normal operation of equipment required to have emergency electrical power.*

NOTATION:
Authority: Health and Safety Code Sections1226, 1275, 18928, 129790 and 129850; Government11152.5
Reference: Health and Safety Code Section 129850

CHAPTER 4 – VENTILATION AIR SUPPLY
Adopt entire 2006 Uniform Mechanical Code (UMC) Chapter and carry forward existing amendments of the 2001 California Mechanical Code (CMC) for OSHPD 1, 2, 3 & 4 with the following modifications:

401.0 General
This chapter contains requirements for ventilation air supply and exhaust, evaporative cooling systems and make up-air requirements for direct-gas-fired heaters, industrial air heaters, and miscellaneous heaters.*[For OSHPD 1, 2, 3 & 4] see ~~part III~~. Sections 404.0 through 418.0.*

402.0 Ventilation Air. *[Not permitted for OSHPD 1, 2, 3 & 4]*
…

403.0 General Requirements. *[Not permitted for OSHPD 1, 2, 3 & 4]*

…

405.0 Evaporative Cooling Systems.

…

405.4 Evaporative Cooling System for Health Care Facilities

[For OSHPD 1, 2, 3 & 4] Direct evaporative cooling systems where the air directly contacts the wetted surface or spray shall be limited in health facilities to nonpatient areas such as laundry rooms, food preparation areas and boiler or machinery rooms. Similar rooms with high heating-producing equipment will be considered when specifically approved by the enforcing agency. The evaporative pads, ~~if used~~, shall be a synthetic type. Filters shall be required in accordance with Tables 4-B and 4-C except utility rooms i.e.: boiler or machinery rooms.

406.0 Reserved

Part ~~III~~ I – Ventilation for Health Care Facilities [For OSHPD 1, 2, 3 & 4]

Section 407.0 – Ventilation System Details [For OSHPD 1, 2, 3 & 4]

407.1 General.

407.1.1 *All supply-air, return air, and exhaust-air systems shall be mechanically operated and such systems for areas listed in Table 4-A shall be operated continuously. Natural ventilation through windows or other openings such as louvers will be considered as supplemental to the required mechanical ventilation systems.*

Exceptions~~:~~ *1. Natural ventilation shall not be used in ~~negative pressure isolation rooms~~ airborne infection isolation rooms* and *~~positive pressure isolation rooms~~ protective environment rooms.*

Exception 2. *The number of air changes may be reduced to 25 percent of the indicated value in Table 4-A, when the room is unoccupied, if provisions are made to ensure the following: (1) the number of air changes per hour indicated is reestablished whenever the space is occupied and (2) the pressure relationship with the surrounding rooms is maintained when the air changes per hour are reduced. In areas requiring no continuous directional control as identified in accordance with Table 4-A, ventilation systems may be shut down when the space is unoccupied and ventilation is not otherwise required. Ventilation shall not be reduced in rooms specifically used for airborne infection control, such as waiting rooms, triage rooms, corridors, reception areas, areas adjacent to waiting areas, ~~negative pressure isolation rooms~~ airborne infection isolation rooms, negative pressure exam room, negative pressure x-ray treatment rooms, and ~~positive pressure isolation rooms~~ protective environment rooms. All operating and delivery rooms shall maintain a minimum of six air changes per hour of total air when not in use.*

…

407.2 Outdoor Air Intakes and Exhaust Outlets.

…

407.2.2 Exhaust Outlets. *Exhaust outlets shall be located a minimum of 10 feet (3048 mm) above adjoining grade and 10 feet (3048 mm) from doors, occupied areas and operable windows.*

Exception: *~~Negative pressure isolation rooms~~ Airborne infection isolation rooms shall comply with Section 414.1.*

…

407.3 Air Balance.

…

407.3.2 *Where the variation in static pressure drop across filters is a significant portion of the total pressure drop, static pressure or pressure differential controls or constant volume devices may be required to ensure the maintenance of air balance relationships shown in Table 4-A regardless of filter loading .*

Exception: *This section does not pertain to skilled nursing facilities, intermediate-care facilities and nonsensitive areas in correctional treatment centers, except for ~~negative pressure isolation rooms~~ airborne infection isolation rooms and ~~positive pressure isolation rooms~~ protective environment rooms*

…

407.4 Air Circulation.

…

407.4.1.1 *Air supplied to operating rooms, cesarean operating rooms, cardiac catherization labs, cystoscopy rooms, delivery rooms and nurseries, shall be delivered at or near the ceiling of the area served, and all air removed from the area shall be removed near floor level. At least two exhaust or recirculation air inlets shall be used in all operating and delivery rooms and shall be located not less than 3 inches (76 mm) nor more than 8 inches (203 mm) above the finished floor.*

Exception: *For ~~negative pressure isolation rooms~~ airborne infection isolation rooms and ~~positive pressure isolation rooms~~ protective environment rooms, see Sections 414.0 and 415.0.*

407.4.1.2 *Room supply air outlets and room recirculation and exhaust air inlets installed in nonsensitive areas shall be located not less than 3 inches (76 mm) above the floor.*

Exception: *For ~~negative pressure isolation rooms~~ airborne infection isolation rooms and ~~positive pressure isolation rooms~~ protective environment rooms, see Sections 414.0 and 415.0.*

407.4.1.3 *Corridors shall not be used to convey supply, return or exhaust air to or from any room~~.~~ if the corridor is required to be of fire resistive construction per the Building Code.*

~~EXCEPTION 1:~~ *~~Small rooms [30 square feet (2.79 m^2) or less] which are mechanically exhausted, such as bathrooms, toilet rooms and janitors' closets operating directly on corridors.~~*

EXCEPTION 1: *Mechanically exhausted toilet rooms ~~[~~ of 50 square feet (4.7 m^2) or less ~~]~~ and small rooms ~~[~~ of 30 square feet(2.79 m^2)or less ~~]~~ such as janitor closets, housekeeping rooms, and electrical or telephone closets opening directly onto corridor.*

EXCEPTION 2: *Air transfer caused by pressure differentials in rooms required to have a positive or negative air balance by Table 4-A ~~or Table 4-C~~.*

…

407.5 Variable Air Volume.

407.5.1 Variable Air Volume Systems (VAV). *Variable air volume systems subjecting the patient to a fluctuating air movement are not acceptable for ~~negative pressure isolation rooms~~ airborne infection isolation rooms, ~~positive pressure isolation rooms~~ protective environment rooms or those critically sensitive areas listed in Table 315. For nonsensitive areas, variable air volume systems meeting the following criteria can be considered:*

407.5.1.1 *The VAV system shall comply with code requirements for outside air, total air, and pressure relationship through the full range of operation from minimum to maximum.*

407.5.1.2 *The central return or exhaust fan shall be controlled to accomplish the variable air volume requirements of the individual rooms served by the fan as described in Section 407.5.1.3. ~~interlocked with and track the central supply fan.~~*

407.5.1.3 *Variable air volume for return or exhaust air shall be accomplished by utilizing an automatic modulating damper in the return or exhaust air for each zone. The damper will modulate from full open to minimum position in conjunction with the supply air VAV terminal box.*

~~407.5.1.4~~ *~~The minimum ventilation rate shall not drop below a total of four air changes per hour with a minimum of two air changes of outdoor air per hour.~~*

…

Section 408.0 - Filters [For OSHPD 1, 2, 3 & 4]

408.1 General. *Filter efficiencies shall be certified by the manufacturer and shall be based on ASHRAE Standard 52.1-1992, Gravimetric and Dust-spot Procedures for Testing Air-Cleaning Devices Used in General Ventilation for Removing Particulate Matter or ASHRAE Standard 52.2-1999, Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size when specifically set forth in these standards.*

…

408.1.5 *Filter bank No. 1 shall be located upstream of the air-conditioning equipment. Filter bank No. 2 and filter bank No. 3 shall be located downstream of the supply fan and all cooling and humidification equipment with efficiencies as indicated in Table 4-B ~~and~~ or Table 4-C.*

EXCEPTION: *Dry steam-type humidifiers for local room humidity control may be installed in the supply air duct downstream of ~~filter bank No. 2~~ the final filter bank where designs are specifically approved by the enforcing agency.*
…

408.2 Filters for Hospitals.

408.2.1 *All air-ventilation systems…*

408.2.2 *Noncentral recirculating air systems providing cooling to high heat producing equipment located in nonsensitive areas shall have a filter with ~~an average efficiency of~~ 30 percent average efficiency based on ASHRAE Standard 52.1-1992 or a minimum efficiency reporting value (MERV) of 8 based on ASHRAE Standard 52.2-1999.*

408.2.3 *Noncentral air systems…*

~~408.2.3.1~~ 408.2.4 *~~Subject to the approval of the authority having jurisdiction~~, Noncentral recirculating air handling systems, i.e., through-the-wall units, fan coil units, and heat pumps may be utilized for single patient rooms of one or more beds. Filtration for these units shall have a minimum weight arrestance value of ~~68~~ 50 percent, based on ASHRAE Standard 52.1-199~~6~~2 or a minimum efficiency reporting value (MERV) of 1, based on ASHRAE Standard 52.2- 1999. The air ventilation system providing the minimum air changes of outdoor air shall comply with Table 4-B. These units may be used as recirculating units only. All outdoor air requirements shall be met by a separate central air handling system.*
408.3 Filters for Skilled Nursing Facilities, Intermediate Care Facilities and Correctional Treatment Centers.

408.3.1 *The air ventilation systems…*

408.3.2 *Noncentral air systems serving…*

~~408.3.2.1~~ 408.3.3 *Noncentral recirculating air-handling systems, i.e. through the wall units, may be utilized for each patient room with one or more beds. Filtration for these units shall have a minimum weight arrestance value of ~~68~~ 50 percent, based on ASHRAE Standard 52.1 199~~6~~2 or a minimum efficiency reporting value (MERV) of 1, based on ASHRAE Standard 52.2-1999. The air ventilation system providing the minimum air changes of outdoor air shall comply with Table 4-C. These units may be used as recirculating units only. All outdoor air requirements shall be met by a separate central air handling system.*

~~408.3.3~~ 408.3.4 *~~Negative pressure isolation rooms~~ Airborne infection isolation rooms, ~~positive pressure isolation rooms~~ protective environment rooms and sensitive areas in correctional treatment centers shall comply with Section 408.2.*
…

Section 410.0 - Laboratories [For OSHPD 1, 2, 3 & 4]

410.1 *The minimum amount of outdoor air in laboratories shall be provided in accordance with Table 4-A. A filter with 90 percent average efficiency based on ASHRAE Standard 52.1-1992 or a minimum efficiency reporting value (MERV) of 14, based on ASHRAE Standard 52.2-1999 shall be installed in the air-supply system at its entrance to the media transfer room.*
…

410.4 *The exhaust from all laboratory hoods in which infectious or radioactive materials are processed shall be equipped with filters having a 99 percent efficiency based on the DOP (dioctylphthalate) test method or a minimum efficiency reporting value (MERV) of 15, based on ASHRAE Standard 52.2-1999 .*
Filter frames shall be durable and carefully dimensioned, and shall provide an airtight fit with the enclosing duct work. All joints between filter segments and the enclosing duct work shall be gasketed or sealed to provide a positive seal against air leakage.

Section 411.0 - Kitchen and Dining Areas [For OSHPD 1, 2, 3 & 4]

411.1 *The air from dining areas may be used to ventilate the food preparation areas only after it has*

passed through a filter with at least an 80 percent average efficiency based on ASHRAE Standard 52.1-1992 or a minimum efficiency reporting value (MERV) of 13, based on ASHRAE Standard 52.2-1999 .

Exception: *For skilled nursing facilities, intermediate care facilities and correctional treatment centers, the air from dining areas may be used to ventilate food preparation areas only after it has passed through a filter with a 50 percent average efficiency based on ASHRAE Standard 52.1-1992 or a minimum efficiency reporting value (MERV) of 10, based on ASHRAE Standard 52.2-1999 .*

…

Section 414.0-~~Negative-Pressure Isolation Rooms~~ Airborne Infection Isolation Rooms [For OSHPD 1, 2, 3 & 4]

414.1 Exhaust Systems. *A separate, dedicated exhaust system shall be provided for ~~negative-pressure isolation rooms~~ airborne infection isolation rooms. The dedicated system may serve more than one ~~negative-pressure isolation room~~ airborne infection isolation room, adjoining toilet room and anteroom. The exhaust ducts shall be identified by appropriate labeling with the words "Caution ~~Negative-Pressure Isolation Room~~ Airborne Infection Isolation Rooms Exhaust" or similar terminology. Such labeling shall be in a manner which is not readily removable and shall appear on the exhaust duct at intervals of not more than 20 feet (6096 mm) and at least once near each room and each story traversed by the exhaust system. Exhaust fans shall comply with Section 407.1.2. The discharge from exhaust fans shall be located above the roof and shall be located a minimum of 25 feet (7620 mm) from areas that may be occupied, doors, operable windows, outdoor air intakes, or other openings into the building. The exhaust fan discharge shall be labeled in a manner which readily identifies the precautions which should be observed. To ensure that the airborne contaminates do not reenter the building, one of the following shall be provided:*

414.1.1 *Exhaust discharge…*

414.1.2 *Exhaust shall discharge above roof level and through an accessible HEPA filter. The HEPA filter shall be located upstream of the exhaust fan and have a minimum efficiency of 99.97 percent based on the DOP method in accordance with Mil-Std. 282 or a minimum efficiency reporting value (MERV) of 17, based on ASHRAE Standard 52.2 1999 . Filter gage shall be installed across the filter. For maintenance of air balance relationship, see Section 407.3.2. The 25-foot (7620 mm) dimension required by Section 414.1 may be reduced when a 99.97 percent HEPA filter or a minimum efficiency reporting value (MERV) of 17, based on ASHRAE Standard 52.2 1999 is used and the reduced dimension is specifically approved by the enforcing a g e n c y .*

414.2 Air Distribution. *The supply outlets and exhaust inlets shall be located to provide airflow patterns that prevent stagnation of the air and eliminate short circuiting of the supply to the exhaust, and minimize exposure of health care workers to airborne infectious particles. Supply-air outlets shall be located at or near the ceiling and at the end of the ~~negative-pressure isolation room~~ airborne infection isolation room which is opposite the head of the bed. Exhaust registers shall be located on the wall behind the patient's head, or as close to that wall as practical and shall be located not less than 3 inches (76 mm) nor more than 24 inches (610 mm) above the finished floor.*

…

Section 415.0 - ~~Positive-Pressure Isolation Rooms~~ Protective Environment Rooms [For OSHPD 1, 2, 3 & 4]

415.1 Air Distribution. *The supply outlets and exhaust and return inlets shall be located to provide airflow patterns that prevent stagnation of the air and eliminate short circuiting of the supply to the exhaust or return. Supply air shall be delivered at or near the ceiling and near the patient's bed. All exhaust or return registers shall be located near the entrance to the ~~positive-pressure isolation room~~ protective environment room and not less than 3 inches (76 mm) nor more than 8 inches (203 mm) above the finished floor.*

…

Section 416.0 - Alarms - ~~Negative – Pressure Isolation Rooms~~ Airborne Infection Isolation Rooms and ~~Positive – Pressure Isolation Rooms~~ Protective Environment Rooms [For OSHPD 1, 2, 3 & 4]

416.1 *An alarm system which is based on static pressure control, volumetric control, or directional flow measurement shall be provided for each isolation room. The alarm system shall consist of a display monitor located on the corridor wall near the door to the room and a visual and audible alarm which annunciates at the room and at a nurses' station or other suitable location that will provide responsible surveillance. A time delay shall be provided to allow for routine openings of doors. The alarm shall annunciate when the supply, return, or exhaust fans are interrupted and when one of the following conditions is not being met during closed door conditions:*

1. When the minimum air quantity difference of 75 cfm (35.4 L/s) required by Table 4-A is not being maintained; or

2. When a minimum pressure differential of 0.001 inch (0.003 kPa) of water and a minimum inward (outward for ~~positive pressure isolation rooms~~ protective environment rooms) air velocity of 100 feet per minute (0.508 m/s) is not being maintained at the air transfer opening required by Table 4-A.
…

Section 417.0 - Testing - ~~Negative – Pressure Isolation Rooms~~ Airborne Infection Isolation Rooms and ~~Positive – Pressure Isolation Rooms~~ Protective Environment Rooms [For OSHPD 1, 2, 3 & 4]
...

Section 418.0 - Design Requirements for Ethylene Oxide (ETO) Sterilization Area [For OSHPD 1, 2, 3, & 4]

418.1 Air Changes. *The ETO sterilization…*

418.2 Exhaust Requirements.
418.2.1 *All air from the ETO…*
418.2.2 *The exhaust fan…*
~~418.3~~ 418.2.3 ~~Discharge Point.~~ *The discharge point…*

418.~~4~~ 3 Ventilation Requirements.
418.~~4.1~~ 3.1 Aeration units. *The aeration units shall…*
418.~~4.2~~ 3.2 Capture box. *When the drain…*
418.~~4.3~~ 3.3 Cylinder Changes. *When not located…*
418.~~4.4~~ 3.4 Sterilizer relief valve. *The ventilation of…*
418.3.5 Ventilation of sterilizer door area. *The system shall be designed to capture the ETO when the door is opened following the completion of the sterilization process. A hood or canopy closed on each end should be installed over the sterilization door. A hood or canopy shall be connected to a dedicated exhaust ventilation system.*

418.4 Gas Valves. *Installation of gas line hand valves at the connection to the supply cylinders are required to minimize leakage during cylinder change.*

418.5 Alarm Systems. *An Audible and visual alarm system shall be installed to alert sterilizer operating personnel if the air flow falls below design cubic feet per minute(L/S)*

TABLE 4-A --PRESSURE RELATIONSHIP AND VENTILATION REQUIREMENTS FOR GENERAL ACUTE CARE HOSPITALS, SKILLED NURSING FACILITIES, INTERMEDIATE CARE FACILITIES, CORRECTIONAL TREATMENT CENTERS, OUTPATIENT FACILITIES AND LICENSED CLINICS

A	B	C	D	E	F
AREA DESIGNATION	AIRBALANCE RELATIONSHIP TO ADJACENT AREAS [8]	MINIMUM AIR CHANGES IF 100% O.S.A.	CONDITIONED AIR NOT 100% O.S.A.		ALL AIR EXHAUSTED DIRECTLY TO OUTDOORS
			Minimum Air Changes of Outdoor Air per Hour	Minimum Total Air Changes per Hour	
Operating room, cardiac cath lab and cystoscopy	*P[7]*	*12*	*5*	*20*	*--*
Patient holding preparation[1]	*E*	*6*	*2*	*6*	*--*
Delivery room, cesarean operating room	*P*	*12*	*5*	*20*	*--*
~~Nursery~~ Newborn/ well baby nursery	*P*	*~~8~~6*	*~~3~~ 2*	*~~12~~ 6*	*--*
~~Recovery~~ Post anesthesia care unit	*E*	*6*	*2*	*6*	*Yes*
~~Intensive/coronary care~~ [9] Intensive care service spaces, Acute respiratory- care service spaces, Burn service spaces, Coronary-care service Spaces, Pediatric intensive-care service spaces[9]	*P*	*6*	*2*	*6*	*--*
Newborn intensive care	*P*	*6*	*2*	*6*	*--*
Emergency department:					
Waiting area	*N*	*12*	*2*	*12*	*Yes[2]*

Operating room	*P*	*12*	*5*	*20*	*---*
Treatment room	*E*	*6*	*2*	*6*	*__*
Trauma room[3]	*P*	*12*	*5*	*20*	*--*
Triage	*N*	*12*	*2*	*12*	*Yes*
Patient room	*E*	*2*	*2*	*6*	*--*
Patient area corridor	*E*	*2*	*2*	*4*	*--*
Labor/delivery/recovery room, Labor/delivery/recovery/ postpartum room	*E*	*2*	*2*	*6*	*--*
~~*Negative-pressure isolation room*~~ *Airborne infection isolation room*	*N*[4]	*12*	*2*	*12*	*Yes*
~~*Negative-pressure isolation anteroom*~~ *Airborne infection isolation anteroom*	*P*[4]	*10*	*2*	*10*	*Yes*
~~*Positive-pressure isolation room*~~ *Protective environment room*	*P*[5]	*15*	*2*	*15*	*--*
~~*Positive-pressure isolation anteroom*~~ *Protective environment anteroom*	*N*[6]	*15*	*2*	*15*	*--*
Treatments, and examination rooms	*E*	*6*	*2*	*6*	*--*
Bronchoscopy and endoscopy	*N*	*12*	*2*	*12*	*Yes*
Special purpose room (SNF & ICF only)	*E*	*6*	*2*	*6*	*Yes*
Radiological / Imaging:					
Angiography Room	*P*	*12*	*5*	*15*	*--*
X-ray (diagnostic and treatment)	*E*	*6*	*2*	*6*	*--*
CT Scan	*E*	*6*	*2*	*6*	*--*
MRI room	*E*	*6*	*2*	*6*	*--*
Fluoroscopy Room	*N*	*6*	*2*	*6*	*Yes*
Dark Room	*N*	*12*	*2*	*12*	*Yes*
Negative-pressure x-ray room	*N*	*12*	*2*	*12*	*Yes*
Ultra sound room	*E*	*6*	*2*	*6*	*--*
Gamma camera	*E*	*6*	*2*	*6*	*--*
Waiting area	*N*	*12*	*2*	*12*	*YES*
Bedpan room	*N*	*--*	*--*	*10*	*Yes*
Bathroom	*N*	*--*	*--*	*10*	*Yes*
Janitors' closet, Housekeeping room	*N*	*--*	*--*	*10*	*Yes*
Sterilizer equipment room	*N*	*--*	*--*	*10*	*Yes*
Sub sterile room	*E*	*10*	*2*	*10*	*Yes*
Linen and trash chute rooms	*N*	*--*	*--*	*10*	*Yes*
Food preparation centers	*E*	*10*	*2*	*10*	*Yes*
Dining room	*E*	*10*	*2*	*10*	*--*
Dishwashing room	*N*	*--*	*--*	*10*	*Yes*
Dietary day storage	*E*	*--*	*--*	*2*	*--*
Laundry, general (clean and dirty)	*E*	*10*	*2*	*10*	*Yes*
Soiled linen sorting and storage	*N*	*--*	*--*	*10*	*Yes*
Clean linen storage	*P*	*2*	*2*	*2*	*--*
Anesthesia storage	*E*	*8*	*--*	*8*	*Yes*
Central medical and surgical supply:					
Soiled or decontamination room	*N*	*4*	*2*	*4*	*Yes*
Clean workroom	*P*	*4*	*2*	*4*	*--*
Unsterile supply	*E*	*2*	*2*	*2*	*--*
Pharmacy/medicine room	*P*	*2*	*2*	*4*	*--*

Laboratory					
General	*N*	*6*	*2*	*6*	*--*
Biochemistry	*P*	*6*	*2*	*6*	*--*
Cytology	*N*	*6*	*2*	*6*	*Yes*
Glass washing	*N*	*10*	*2*	*10*	*Yes*
Histology	*N*	*6*	*2*	*6*	*Yes*
Microbiology	*N*	*6*	*2*	*6*	*Yes*
Nuclear medicine	*N*	*6*	*2*	*6*	*Yes*
Pathology	*N*	*6*	*2*	*6*	*Yes*
Serology	*P*	*6*	*2*	*6*	*--*
Sterilizing	*N*	*10*	*2*	*10*	*Yes*
Media transfer	*P*	*4*	*2*	*4*	*--*
Infectious disease and virus	*N*	*6*	*2*	*6*	*Yes*
Bacteriology	*N*	*6*	*2*	*6*	*Yes*
Negative-pressure treatment/exam room	*N*	*12*	*2*	*12*	*Yes*
Physical therapy and hydrotherapy	*N*	*6*	*2*	*6*	*--*
Soiled workroom (utility room)	*N*	*4*	*2*	*10*	*Yes*
Clean workroom	*P*	*4*	*2*	*6*	*--*
Autopsy	*N*	*12*	*2*	*12*	*Yes*
Toilet room	*N*	*--*	*--*	*10*	*Yes*
Shower room	*N*	*--*	*--*	*10*	*Yes*
Waiting area primary care clinic	*N*	*10*	*2*	*10*	*Yes*[2]

P = Positive E-Equal N=Negative

[1]The pressure relationship of the entire emergency department shall be negative to other adjacent areas.

[2]Air may be recirculated if a high-efficiency particulate air (HEPA) filter with a minimum efficiency of 99.97 percent or a minimum efficiency reporting value (MERV) of 17 is installed in the return air duct which serves the waiting area.

[3]The term "trauma room" as used here is the operating room space in the emergency department or other trauma reception area that is used for emergency surgery. The first aid room and/or "emergency room" used for initial treatment of accident victims may be ventilated as noted for the "treatment rooms."

[4]The anteroom shall have positive air pressure in relation to the ~~negative-pressure isolation~~ airborne infection isolation room. A door louver, transfer grille, or other acceptable means shall be provided to allow for airflow from the anteroom to the ~~negative-pressure isolation~~ airborne infection isolation room. The ~~negative-pressure isolation~~ airborne infection isolation room shall have negative pressure in relation to the anteroom, and the adjoining toilet room shall have negative pressure in relation to the n ~~negative-pressure isolation~~ airborne infection isolation room. Negative pressure shall be achieved by balancing the exhaust cfm to no less than 75 cfm (35.4 L/s) greater than the supply cfm for each airborne infection isolation room the anteroom serves. The overall area consisting of the anteroom, ~~negative-pressure isolation~~ airborne infection isolation room, and adjoining toilet room shall have an equal air ~~pressure~~ balance in relation to the corridor.

EXCEPTION: For correctional treatment centers, the location and design of the air transfer device shall not compromise the safety, security and protection of staff, inmates, and property.

[5]Positive-pressure shall be achieved by balancing the supply cfm to not less than 75 cfm (35.4 L/s) greater than the exhaust and return cfm for each protective environment room the anteroom serves.

[6]The anteroom shall have negative air pressure in relation to the ~~positive-pressure isolation~~ protective environment room. A door louver, transfer grille, or other acceptable means shall be provided to allow for airflow from the ~~positive-pressure isolation~~ protective environment room to the anteroom. The ~~positive-pressure isolation~~ protective environment room shall have positive-pressure in relation to the anteroom and adjoining toilet room. Positive pressure shall be achieved by balancing the supply cfm to not less than 75 cfm (35.4 L/s) greater than the exhaust and return cfm. The overall area consisting of the anteroom, ~~positive-pressure isolation~~ protective environment room, and adjoining toilet room shall have an equal air ~~pressure~~ balance in relation to the corridor.

EXCEPTION: For correctional treatment centers, the location and design of the air transfer device shall not compromise the safety, security, and protection of staff, inmates, and property.

[7]Cystoscopy may have equal air balance relationship to adjacent areas when approved by authority having jurisdiction.

8. For operating rooms, cardiac catheterization labs, angiography rooms, cystoscopy rooms, delivery rooms, cesarean operating rooms, newborn intensive care, intensive care units, and nurseries provide approximately 15% excess supply air to the room or a sufficient quantity of excess supply air to maintain an appropriate positive air balance based on the room tightness and number of doors. For all rooms not listed in this footnote or not listed in Table 315 requiring either a positive or negative air balance, provide approximately 10% differential CFM between supply and return/exhaust airflow but not less than 25 CFM differential shall be provided regardless of room size. Room function, size, and tightness may be considered when determining the differential airflow required.

9. Intensive care patient rooms, which contain ~~toilet or bedpan washing fixture~~ a modular toilet/sink combination unit within the room, shall be provided with a minimum of 75 CFM of exhaust directly over the ~~toilet or bedpan washing fixture~~ modular toilet/sink combination unit.

Table 4-B - Filter Efficiencies for Central Ventilation and Air- Conditioning Systems in General Acute Care Hospitals, Acute Psychiatric Hospitals, Outpatient Facilities and Licensed Clinics.[1]

AREA DESIGNATION	MINIMUM NUMBER OF FILTER BANKS	FILTER EFFICIENCY % FILTER BANK (Minimum efficiency reporting value MERV)[5]		
		No. 1[1]	No. 2[1]	No. 3[2]
Orthopedic operating room, bone marrow transplant operating room, organ transplant operating room	3	30% (8)	90% (14)	99.97%[3] (17)
~~Positive-pressure isolation rooms~~ Protective environment rooms	3	30% (8)	90% (14)	99.97%[4] (17)
Angiography; cardiac cath labs; operating rooms; delivery rooms; nurseries; patient care, treatment, cystoscopy, cesarean operating room, diagnostic and related areas; ~~negative-pressure isolation rooms~~ airborne infection isolation rooms; areas providing direct patient service or clean supplies such as sterile and clean processes	2	30% (8)	90% (14)	
Laboratories	2	30% (8)	80% (13)	
Administrative, med staff support areas, bulk storage, soiled holding areas, food preparation areas and laundries	1	30% (8)		

1Based on ASHRAE Standard 52.1-1992 or ASHRAE Standard 52.2-1999..
2Based on DOP test in accordance with MIL-STD-282. or Based on ASHRAE Standard 52.2 1999.
3HEPA filters at air outlet or other locations when approved by the authority having jurisdiction.
4HEPA filter located in the supply duct which serves the positive-pressure isolation room or rooms may serve more than one supply outlet and more than one positive-pressure isolation room. HEPA filter or a filter with minimum efficiency reporting value (MERV) of 17 installation shall be designed and equipped to permit safe removal, disposal and replacement of filters.
5The numbers in parentheses represent MERV rating based on ASHRAE Standard 52.2-1999.

TABLE 4-C - Filter Efficiencies for Central Ventilation and Air- Conditioning Systems in Skilled Nursing Facilities and Intermediate Care Facilities and Correctional Treatment Centers.[1]

AREA DESIGNATION	MINIMUM NUMBER OF FILTER BANKS	FILTER EFFICIENCY % FILTER BANK (Minimum efficiency reporting value MERV)[3]	
		No. 1[1]	No. 2[1][2]
All areas for inpatient care, treatment and/or diagnosis, and those areas providing direct service or cleaning supplies	2	30% (8)	80% (13)

Administrative, bulk storage, soiled holding, laundries and food prep areas	*1*	*30% [2][3]* *(8)*	

[1]Based on ASHRAE Standard 52.1- 1992. or ASHRAE Standard 52.2- 1999.
[2]~~Preferred location is downstream of the supply fan~~.
~~3~~[2]Filters are not required for evaporative coolers serving laundries and food preparation areas.
[3]The numbers in parentheses represent MERV rating based on ASHRAE 52.2-1999.

NOTATION:
Authority: Health and Safety Code Sections1226, 1275, 18928, 129790 and 129850; Government11152.5
Reference: Health and Safety Code Section 129850

CHAPTER 5 – EXHAUST SYSTEMS
Adopt entire 2006 Uniform Mechanical Code (UMC) Chapter and carry forward existing amendments of the 2001 California Mechanical Code (CMC) for OSHPD 1, 2, 3 & 4. Amend Section 504.1. Also, existing amendment is relocated from 2001 CMC Section 509.2 to 2006 UMC Section 508.1.1,

504.0 Environmental Air Ducts.
504.1 Makeup and Exhaust-Air Ducts. Environmental air ducts not regulated by other provisions of this code shall comply with this section. Ducts shall be substantially airtight and shall comply with the provisions of Chapter 6. Exhaust ducts shall not extend into or through ducts or plenums. Exhaust ducts shall terminate outside the building and shall be equipped with back-draft dampers. ***[For OSHPD 1, 2 & 4] Exception: Back-draft dampers are not required when the exhaust fan must operate continuously.*** Environmental air ducts that have an alternate function as a part of an approved smoke-control system do not require design as Class 1 product-conveying ducts.

Section 508.0 Hoods.
Section 508.1 Where Required. Hoods shall be….
Section 508.1.1 Construction. The hood or that portion of a primary collection …
All hoods shall be secured in place ***[For OSHPD 1, 2 & 4]*** *to resist the lateral loads given in the California Building Code, Title 24, Part 2* by noncombustible supports.

NOTATION:
Authority: Health and Safety Code Sections1226, 1275, 18928, 129790 and 129850; Government11152.5
Reference: Health and Safety Code Section 129850

CHAPTER 6 – DUCT SYSTEMS
Adopt entire 2006 Uniform Mechanical Code (UMC) Chapter and carry forward existing amendments of the 2001 California Mechanical Code (CMC) for OSHPD 1, 2, 3 & 4 with the following modifications:

602.0 Material.
602.1 General. Supply air, return air, and outside air for heating, cooling, or evaporative cooling systems shall be conducted through duct systems constructed of metal as set forth in Tables 6-1, 6-2, 6-3, 6-4, 6-7, 6-8, 6-9, and 6-10, or metal ducts complying with UMC Standard No. 6-2 or the referenced HVAC duct construction standard in Chapter 17, Part II. Rectangular ducts in excess of 2 inches w.g. shall comply with UMC Standard No. 6-2 or the referenced HVAC duct construction standard in Chapter 17, Part II. Ducts, plenums, and fittings may be constructed of asbestos cement, concrete, clay, or ceramics when installed in the ground or in a concrete slab, provided the joints are tightly sealed.

Corridors shall not be used to convey air to or from rooms if the corridor is required to be of fire-resistive construction per the Building Code.

EXCEPTION 1: [For OSHPD 1, 2, 3 & 4]: *See Section 407.4.1.3 Exception 1.*

~~***EXCEPTION 1: [For OSHPD 1, 2, 3 & 4]:*** *In health facilities, air from corridors may be used as makeup air to ventilate small rooms of 30 square feet (2.79 m^2) or less which are mechanically exhausted, such as bathrooms, toilet rooms, janitor closets, and electrical or telephone closets opening directly onto corridors.*~~

~~***EXCEPTION 2: [OSHPD 1, 2, 3 & 4]:*** *Air transfer caused by pressure differentials in rooms required to have a positive or negative air balance by Table 4-A.*~~

[Not permitted for OSHPD 1, 2, 3 & 4] Concealed building spaces or independent construction within

buildings may be used as ducts or plenums.
…

605.0 Insulation of Ducts

605.1 [For OSHPD 1, 2, 3(surgical clinics), & 4] *Thermal acoustical lining materials shall not be installed within ducts, terminal boxes, sound traps, and other in-duct systems serving areas such as operating, cesarean operating rooms, delivery, ~~and recovery~~ rooms, post anesthesia care units, cystoscopy, cardiac cath labs, nurseries, intensive care units, newborn intensive care units, and ~~negative pressure isolation~~ airborne infection Isolation rooms unless terminal filters with 90 percent average efficiency based on ASHRAE Standard 52.2-1992 or minimum efficiency rating value(MERV) of 14 are installed downstream of the duct lining.*

605.2 [For OSHPD 1, 2 & 4] *Thermal or acoustical lining materials shall not be installed within ducts which are downstream of the 99.97 percent high-efficiency particulate air (HEPA) filter or with minimum efficiency rating value(MERV) of 17 required in Section ~~407.2.1~~ 408.2.1 for ~~positive pressure isolation~~ protective environment rooms.*
…

607.0 Ventilated Ceilings
607.1 General.
607.1.1 [For OSHPD 1, 2, 3 & 4] *Ventilating ceilings are not permitted in health facilities.*

NOTATION:
Authority: Health and Safety Code Sections1226, 1275, 18928, 129790 and 129850; Government11152.5
Reference: Health and Safety Code Section 129850

CHAPTER 7 – COMBUSTION AIR
Adopt entire 2006 Uniform Mechanical Code (UMC) Chapter for OSHPD 1, 2, 3 & 4 without amendments. The 2001 California Mechanical Code (CMC) amendment indicated below will not be carried forward to the 2006 UMC:

~~707.2.1 Designed Installations – Compliance.~~ *~~[For OSHPD 1, 2, 3 & 4] When, in the opinion of the authority having jurisdiction, the designed installation does not comply with Table 7-1 or its equivalent, calculations shall be submitted to the authority having jurisdiction for approval.~~*

NOTATION:
Authority: Health and Safety Code Sections1226, 1275, 18928, 129790 and 129850; Government11152.5
Reference: Health and Safety Code Section 129850

CHAPTER 8 – CHIMNEYS AND VENTS
Adopt entire 2006 Uniform Mechanical Code (UMC) Chapter for OSHPD 1, 2, 3 & 4 without amendments.

NOTATION:
Authority: Health and Safety Code Sections1226, 1275, 18928, 129790 and 129850; Government11152.5
Reference: Health and Safety Code Section 129850

CHAPTER 9 – INSTALLATION OF SPECIFIC EQUIPMENT
Adopt entire 2006 Uniform Mechanical Code (UMC) Chapter and carry forward existing amendments of the 2001 California Mechanical Code (CMC) for OSHPD 1, 2, & 4 with the following modification. Also, relocate existing amendment from 2001 CMC Section 912.0 to 2006 UMC Section 907.1.

902.0 General.
(A) This chapter is applicable primarily to nonindustrial-type gas utilization equipment …

(B) Gas utilization equipment shall not be installed …

(C) Where the room size in comparison with the size of the equipment …

(D) [For OSHPD 1, 2 & 4] *Warm air furnaces shall not be installed under openable windows on exterior walls.*
…
907.0 Decorative Appliances for Installation in Vented Fireplaces.
907.1 Prohibited Installations. Decorative appliances for installation in vented fireplaces shall not be installed in bathrooms or bedrooms unless the appliance is listed and bedroom or bathroom has the required volume in

accordance with Section 701.2. [NFPA 54:9.6.1] ***[For OSHPD 1, 2 & 4]*** *A vented decorative appliance shall not be located in any hospital, skilled nursing facility, intermediate care facility or correctional treatment center.*

NOTATION:
Authority: Health and Safety Code Sections1226, 1275, 18928, 129790 and 129850; Government11152.5
Reference: Health and Safety Code Section 129850

CHAPTER 10 – STEAM AND HOT-WATER BOILERS
Adopt entire 2006 Uniform Mechanical Code (UMC) Chapter for OSHPD 1, 2, 3 & 4 without amendments.

NOTATION:
Authority: Health and Safety Code Sections1226, 1275, 18928, 129790 and 129850; Government11152.5
Reference: Health and Safety Code Section 129850

CHAPTER 11 – REFRIGERATION
Adopt entire 2006 Uniform Mechanical Code (UMC) Chapter and carry forward existing amendments of 2001 California Mechanical Code (CMC) for OSHPD 1, 2, 3 & 4 with the following modification. Also, repeal OSHPD amendment to Section 1107.5

1107.5 Separation. Refrigeration machinery rooms shall be separated from other portions of the building, as required in ***[For OSHPD 1, 2, 3 & 4]*** ~~*Chapter 28, Mechanical Systems and*~~ the special hazards provisions of the Building Code. Penetrations shall be sealed to inhibit the passage of refrigerant vapor.

Table 11-1
Refrigerant Groups[1], Properties[2] and Allowable Quantities[3] ~~**14**~~*, 13*

(Data reprinted with permission from The American Society of Heating, Refrigerating, and Air-Conditioning Engineers)

Refrigerant	Chemical Formula	Chemical Name[4] (Composition for Blends)	Safety Group[1]	PEL[5] (ppm)	IDLH[6] (ppm)	Pounds per 1000 cf of Space[7]
R-11	CCl_3F	Trichlorofluoromethane	A1	C100[8]	4,000[10]	1.60
R-12	CCl_2F_2	Dichlorodifluoromethane	A1	1000	40,000	12.00
R-13	CCF_3	Chlorotrifluoromethane	A1	1000	67,000	18.00
R-13B1	$CBrF_3$	Bromotrifluoromethane	A1	1000	57,000	22.00
R-14	CF_4	Tetrafluoromethane (carbon tetrafluoride)	A1	1000	67,000	15.00
R-22	$CHClF_2$	Chlorodifluoromethane	A1	1000[10]	42,000[11]	9.4
R-23	CHF4	Trifluoromethane	A1	-	-	-
R-113	CCl_2FCClF_2	1,1,2-trichloro-1,2,2-trifluoroethane	A1	1000	4500	1.90
R-114	$CClF_2CClF_2$	1,2-dichloro-1,1,2,2-tetrafluoethane	A1	1000	50,000	9.40
R-123	$CHCl_2CF_3$	2,2-dichloro-1,1,1,-trifluoroethane	B1	10[10]	4000[11]	1.60
R-124	$CHClFCF_3$	1,2-dichloro-1,1,1,-tetrafluoethane	A1	-	-	-
R-134a	CF_3CH_2F	1,1,1,2-tetrafluoroethane	A1	1000[10]	50,000[11]	16.00
R-170	CH_3CH_3	Ethane	A3	1000	6,400	0.50
R-236fa	$CF_3CH_2CF_3$	1,1,1,3,3,3-hexafluoropropane	A1	-	-	-
R-245fa	$CF_3CH_2CHF_2$	1,1,1,3,3-pentafluoropropane	A3	-	-	-
R-290	$CH_3CH_2CH_3$	Propane	A3	1000	4,400	0.50
R-400	Azeotrope	R-12/114	A1	-	-	-
R-401A	Azeotrope	R-22/152a/124 (53/13/34)	A1	-	-	-
R-401B	Azeotrope	R-22/152a/124	A1	-	-	-

		(61/11/28)				
R-401C	Azeotrope	R-22/152a/124 (33/15/52)	A1	-	-	-
R-402A	Azeotrope	R-125/290/22 (60/2/38)	A1	-	-	-
R-402B	Azeotrope	R-125/290/22 (38/2/60)	A1	-	-	-
R-404A	Azetrope	R-125/143a/34a (44/52/4)	A1	-	-	-
R-407A	Azeotrope	R-32/125/134a (20/40/40)	A1	-	-	-
R-407B	Azeotrope	R-32/125/134a (10/70/20)	A1	-	-	-
R-407C	Azeotrope	R-32/125/134a (23/25/52)	A1	-	-	-
R-407D	Azeotrope	R-32/125/134a (15/15/70)	A1	-	-	-
R-407E	Azeotrope	R-32/125/134a (25/15/60)	A1	-	-	-
R-408A	Azeotrope	R-125/143a/22 (7/46/47)	A1	-	-	-
R-409A	Azeotrope	R-22/124/142b (60/25/15)	A1	-	-	-
R-410A	Azeotrope	R-32/125 (50/50)	A1	-	-	-
R-416A	Azeotrope	R-134a/124/600 (59/39.5/1.5)	A1	-	-	-
R-500 73.8% 26.2%	Azetrope CCl_2F_2 CCIF2CHF3	R-12/125a (73.8/26.2) Dichlorodifluoromethane 1,1-difuoroethane	A1	1000[10]	47,000[10]	12.00
R-502 48% 51.2%	Azeotrope CHCIF2 CCIF2CF3	R-23/13 (48.8/51.2) Chlorodifluoroethane 1-chloro-1,1,2,2,2-pentafluoroethane	A1	1000	67,000	15.00
R-503	Azeotrope	R-23/13 (48.8/51.2)	A1	1000	67,000	15.00
R-507A	Azeotrope	R-125/143a (50/50)	A1	-	-	-
R-508A	Azeotrope	R-23/116 (39/61)	A1	-	-	-
R-508B	Azeotrope	R-23/116 (46/54)	A1	-	-	-
R-509A	Azeotrope	R-22/218 (44/560)	A1	-	-	-
R-600	$CH_3CH_2CH_2CH_3$	Butane	A3	800	3,400	0.51
R-600a	$CH(CH_2)_2CH_3$	Isobutane (2-methyl propane)	A3	800	3,400	0.51
R-717	NH_3	Ammonia	B2	50[12]	500	0.022
R-718	H_2O	Water	A1	-	-	-
R-744	CO_2	Carbon Dioxide	A1	5000	50,000	5.70
R-1150	$CH_2=CH_2$	Ethene (ethylene)	A3	1000	5,200	0.38
R-1270	$CH_3CH=CH_2$	Propane 9propylene)	B3	1000	3,400	0.37

For SI: 1 pound = 0.454kg, 1 cubic foot = 0.0283m^3.

1 Refrigerant safety group designation is in accordance with Section 1102.0.

2 Refrigerant properties are those needed for this chapter.

3 Allowable quantities are for high-probability systems under Section 1103.0 only.

4 Chemical name shown is the preferred name.

5 PEL is that designated in 29 CFR 1910.1000 unless otherwise indicated.

6 IDLH is that designated by NIOSH unless otherwise designated.

7 Pounds of refrigerant in a high-probability system per 1000 cubic feet (28.3kg/m^3) of occupied space. See Section 1104.0. This column does not apply to refrigerant machinery rooms or areas covered by Section 1106.0.

8 The PEL value shown is the TLV-C recommended by ACGIH.

9 The IDLH value shown is reduced from that designated by NIOSH in light of cardiac sensitization potential.

10 A PEL has not yet been established; the value given was determined in a consistent manner.

11 An IDLH has not yet been established; the value given was determined in a consistent manner.

12 OSHA PEL is 50ppm; ACGIH TLV-WA is 25ppm.

~~14~~13 ***[For OSHPD 1, 2 & 4]*** *The quantity of refrigerant in each system is limited to 50% of the amount listed.*

Exception: kitchens, laboratories, and mortuaries.

NOTATION:
Authority: Health and Safety Code Sections1226, 1275, 18928, 129790 and 129850; Government11152.5
Reference: Health and Safety Code Section 129850

CHAPTER 12 – HYDRONICS
Adopt entire 2006 Uniform Mechanical Code (UMC) Chapter for OSHPD 1, 2, 3 & 4 without amendments.

NOTATION:
Authority: Health and Safety Code Sections1226, 1275, 18928, 129790 and 129850; Government11152.5
Reference: Health and Safety Code Section 129850

CHAPTER 13 – FUEL PIPING
Adopt entire 2006 Uniform Mechanical Code (UMC) Chapter for OSHPD 1, 2, 3 & 4 without amendments.

NOTATION:
Authority: Health and Safety Code Sections1226, 1275, 18928, 129790 and 129850; Government11152.5
Reference: Health and Safety Code Section 129850

CHAPTER 14 – PROCESS PIPING
Adopt entire 2006 Uniform Mechanical Code (UMC) Chapter for OSHPD 1, 2, 3 & 4 without amendments.

NOTATION:
Authority: Health and Safety Code Sections1226, 1275, 18928, 129790 and 129850; Government11152.5
Reference: Health and Safety Code Section 129850

CHAPTER 15 – SOLAR SYSTEMS
Not adopted for OSHPD 1, 2, 3 & 4.

NOTATION:
Authority: Health and Safety Code Sections1226, 1275, 18928, 129790 and 129850; Government11152.5
Reference: Health and Safety Code Section 129850

CHAPTER 16 – STATIONARY FUEL CELL POWER PLANTS
Not adopted for OSHPD 1, 2, 3 & 4.

NOTATION:
Authority: Health and Safety Code Sections1226, 1275, 18928, 129790 and 129850; Government11152.5
Reference: Health and Safety Code Section 129850

CHAPTER 17 – STANDARDS
Adopt entire 2006 Uniform Mechanical Code (UMC) Chapter for OSHPD 1, 2, 3 & 4 without amendments.

NOTATION:
Authority: Health and Safety Code Sections1226, 1275, 18928, 129790 and 129850; Government11152.5
Reference: Health and Safety Code Section 129850

APPENDIX A – UNIFORM MECHANICAL CODE STANDARDS NO. 2-2, 6-2, AND 6-5
Adopt entire 2006 Uniform Mechanical Code (UMC) Appendix for OSHPD 1, 2, 3 & 4 without amendments.

NOTATION:
Authority: Health and Safety Code Sections1226, 1275, 18928, 129790 and 129850; Government11152.5
Reference: Health and Safety Code Section 129850

APPENDIX B – PROCEDURES TO BE FOLLOWED TO PLACE GAS EQUIPMENT IN OPERATION
Adopt entire 2006 Uniform Mechanical Code (UMC) Appendix for OSHPD 1, 2, 3 & 4 without amendments.

NOTATION:
Authority: Health and Safety Code Sections1226, 1275, 18928, 129790 and 129850; Government11152.5
Reference: Health and Safety Code Section 129850

APPENDIX C – INSTALLATION AND TESTING OF OIL (LIQUID) FUEL–FIRED EQUIPMENT
Adopt entire 2006 Uniform Mechanical Code (UMC) Appendix for OSHPD 1, 2, 3 & 4 without amendments.

NOTATION:
Authority: Health and Safety Code Sections1226, 1275, 18928, 129790 and 129850; Government11152.5
Reference: Health and Safety Code Section 129850

APPENDIX D – UNIT CONVERSION TABLES
Adopt entire 2006 Uniform Mechanical Code (UMC) Appendix for OSHPD 1, 2, 3 & 4 without amendments.

NOTATION:
Authority: Health and Safety Code Sections1226, 1275, 18928, 129790 and 129850; Government11152.5
Reference: Health and Safety Code Section 129850

CHAPTER 1
ADMINISTRATION

Sections in 2001 CMC	Proposed Adoption	OSHPD				Comments
		1	2	3	4	
	Adopt entire chapter without amendments					
	Adopt entire chapter with amendments listed below					
	Adopt only sections listed below					
101.1 CA		X	X	X	X	
102.0 CA		X	X	X	X	
103.1 CA		X	X	X	X	
103.1.1.1 CA		X	X	X	X	
104.6 CA		X	X	X	X	
108.1.1 CA		X	X	X	X	
108.1.1.12 CA		X	X	X	X	
108.1.1.12.1 CA		X				
108.1.1.12.2 CA			X			
108.1.1.12.3 CA				X		
108.1.1.12.4 CA					X	
119.0 CA		X	X	X	X	
120.0 CA		X	X	X	X	
121.1 CA		X	X	X	X	

CHAPTER 2
DEFINITIONS

Sections in 2001 CMC	Proposed Adoption	OSHPD				Comments
		1	2	3	4	
	Adopt entire chapter without amendments					
	Adopt entire chapter with amendments listed below	X	X	X	X	
	Adopt only sections listed below					
203.0 CA		X	X	X	X	
204.0 CA		X	X	X	X	
207.0 CA		X	X	X	X	
210.0 CA		X	X	X	X	
217.0 CA		X	X	X	X	
221.0 CA		X	X	X	X	
223.0 CA		X	X	X	X	

CHAPTER 3
GENERAL REQUIRMENTS

Sections in 2001 CMC	Proposed Adoption	OSHPD				Comments
		1	2	3	4	
	Adopt entire chapter without amendments					
	Adopt entire chapter with amendments listed below	X	X	X	X	
	Adopt only sections listed below					
304.2 Except. 2 CA		X	X		X	
313.0 CA		X	X		X	
314.1 CA		X			X	
314.2 CA			X		X	
315.1 CA		X			X	
315.2 CA			X		X	
315.3 CA				X		
316.0 CA		X	X	X	X	
Table 315 CA		X	X	X	X	

CHAPTER 4
VENTILATION AIR SUPPLY

Sections in 2001 CMC	Proposed Adoption	OSHPD				Comments
		1	2	3	4	
	Adopt entire chapter without amendments					
	Adopt entire chapter with amendments listed below	~~X~~	~~X~~	~~X~~	~~X~~	
	Adopt only sections listed below	X	X	X	X	
401.0 CA		X	X	X	X	
404.0 UMC		X	X	X	X	
405.0 CA		X	X	X	X	
407.0 CA		X	X	X	X	
408.0 CA		X	X	X	X	
409.0 CA		X	X	X	X	
410.0 CA		X	X	X	X	
411.0 CA		X	X	X	X	
412.0 CA		X	X	X	X	
413.0 CA		X	X	X	X	
414.0 CA		X	X	X	X	
415.0 CA		X	X	X	X	
416.0 CA		X	X	X	X	
416.3 CA					X	
417.0 CA		X	X	X	X	
418.0 CA		X	X	X	X	
Table 4-A CA		X	X	X	X	
Table 4-B CA		X		X		
Table 4-C CA			X		X	

CHAPTER 5
EXHAUST SYSTEMS

Sections in 2001 CMC	Proposed Adoption	OSHPD				Comments
		1	2	3	4	
	Adopt entire chapter without amendments			X		
	Adopt entire chapter with amendments listed below	X	X		X	
	Adopt only sections listed below					
	508.1.1 CA	X	X		X	
~~509.2 CA~~		~~X~~	~~X~~		~~X~~	

CHAPTER 6
DUCT SYSTEMS

Sections in 2001 CMC	Proposed Adoption	OSHPD				Comments
		1	2	3	4	
	Adopt entire chapter without amendments					
	Adopt entire chapter with amendments listed below	X	X	X	X	
	Adopt only sections listed below					
602.1 Except. CA		X	X	X	X	
602.3.1 CA		X	X	X	X	
605.0 CA		X	X	X	X	
605.1 CA		X	X	X	X	
605.2		X	X		X	
607.1.1		X	X	X	X	

CHAPTER 7
COMBUSTION AIR

Sections in 2001 CMC	Proposed Adoption	OSHPD				Comments
		1	2	3	4	
	Adopt entire chapter without amendments	X	X	X	X	
	Adopt entire chapter with amendments listed below	~~X~~	~~X~~	~~X~~	~~X~~	
	Adopt only sections listed below					
~~707.2.1 CA~~		~~X~~	~~X~~	~~X~~	~~X~~	

CHAPTER 8
CHIMNEYS AND VENTS

Sections in 2001 CMC	Proposed Adoption	OSHPD				Comments
		1	2	3	4	
	Adopt entire chapter without amendments	X	X	X	X	
	Adopt entire chapter with amendments listed below					
	Adopt only sections listed below					

CHAPTER 9
INSTALLATION OF SPECIFIC EQUIPMENT

Sections in 2001 CMC	Proposed Adoption	OSHPD				Comments
		1	2	3	4	
	Adopt entire chapter without amendments			X		
	Adopt entire chapter with amendments listed below	X	X		X	
	Adopt only sections listed below					
	902.0 (D) CA	X	X		X	
~~904.8 CA~~		~~X~~	~~X~~		~~X~~	
	907.1 CA	X	X		X	
~~912.0 CA~~		~~X~~	~~X~~		~~X~~	

CHAPTER 10
STEAM AND HOT WATER BOILERS

Sections in 2001 CMC	Proposed Adoption	OSHPD				Comments
		1	2	3	4	
	Adopt entire chapter without amendments	X	X	X	X	
	Adopt entire chapter with amendments listed below					
	Adopt only sections listed below					

CHAPTER 11
REFRIGERATION

Sections in 2001 CMC	Proposed Adoption	OSHPD				Comments
		1	2	3	4	
	Adopt entire chapter without amendments					
	Adopt entire chapter with amendments listed below	X	X	X	X	
	Adopt only sections listed below					
1131.1 CA		X	X	X	X	
Table 11-1 CA		X	X		X	
Table 11-2 CA		X	X	X	X	

CHAPTER 12
HYDRONICS

Sections in 2001 CMC	Proposed Adoption	OSHPD				Comments
		1	2	3	4	
	Adopt entire chapter without amendments	X	X	X	X	
	Adopt entire chapter with amendments listed below					
	Adopt only sections listed below					

CHAPTER 13
FUEL GAS PIPING

Sections in 2001 CMC	Proposed Adoption	OSHPD				Comments
		1	2	3	4	
	Adopt entire chapter without amendments	X	X	X	X	
	Adopt entire chapter with amendments listed below					
	Adopt only sections listed below					

CHAPTER 14
PROCESS PIPING

Sections in 2001 CMC	Proposed Adoption	OSHPD				Comments
		1	2	3	4	
	Adopt entire chapter without amendments	X	X	X	X	
	Adopt entire chapter with amendments listed below					
	Adopt only sections listed below					

CHAPTER 15
SOLAR SYSTEMS

Sections in 2001 CMC	Proposed Adoption	OSHPD				Comments
		1	2	3	4	
	Adopt entire chapter without amendments					
	Adopt entire chapter with amendments listed below					
	Adopt only sections listed below					

CHAPTER 16
STATIONARY FUEL CELL POWER PLANTS

Sections in 2001 CMC	Proposed Adoption	OSHPD				Comments
		1	2	3	4	
	Adopt entire chapter without amendments					
	Adopt entire chapter with amendments listed below					
	Adopt only sections listed below					

CHAPTER 17
STANDARDS

Sections in 2001 CMC	Proposed Adoption	OSHPD				Comments
		1	2	3	4	
	Adopt entire chapter without amendments	X	X	X	X	
	Adopt entire chapter with amendments listed below					
	Adopt only sections listed below					

APPENDIX A
UNIFORM MECHANICAL CODE STANDARD NO. 2-2, 6-2, AND 6-5

Sections in 2001 CMC	Proposed Adoption	OSHPD				Comments
		1	2	3	4	
	Adopt entire chapter without amendments	X	X	X	X	
	Adopt entire chapter with amendments listed below					
	Adopt only sections listed below					

APPENDIX B
PROCEDURES TO BE FOLLOWED TO PLACE GAS EQUIPMENT IN OPERATION

Sections in 2001 CMC	Proposed Adoption	OSHPD				Comments
		1	2	3	4	
	Adopt entire chapter without amendments	X	X	X	X	
	Adopt entire chapter with amendments listed below					
	Adopt only sections listed below					

APPENDIX C
INSTALLATION AND TESTING OF OIL (LIQUID) FUEL-FIRED EQUIPMENT

Sections in 2001 CMC	Proposed Adoption	OSHPD				Comments
		1	2	3	4	
	Adopt entire chapter without amendments	X	X	X	X	
	Adopt entire chapter with amendments listed below					
	Adopt only sections listed below					

APPENDIX D
UNIT CONVERSION TABLES

Sections in 2001 CMC	Proposed Adoption	OSHPD				Comments
		1	2	3	4	
	Adopt entire chapter without amendments	X	X	X	X	
	Adopt entire chapter with amendments listed below					
	Adopt only sections listed below					